



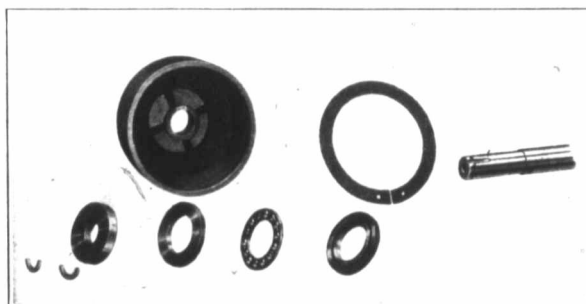
CCL NO. 3, THREE-PHASE, 60 CYCLE, VERTICAL MOTOR - COMPLETE PARTS

type CCL motor is arranged for operation with the shaft vertical. The electrical design and characteristics are identical with those of the horizontal form. The special mechanical features are as follows:

**Frame.** The frame is a cylindrical casting without supporting feet.

**Bearing Brackets.** Each bearing bracket has ventilating openings near its outer edge as on a horizontal motor. The upper bracket has a solid central section to prevent the entrance of foreign substances. This bracket carries the thrust bearing and a guide bearing. The lower bracket is cast with a flange, or base, for supporting the motor, and with ventilating openings in the central portion. This bracket also carries a guide bearing.

**Bearings.** The ball thrust bearing carried by the upper bracket is capable of carrying something additional to the weight of the rotor, the exact amount of the excess weight depending on the size and speed of the motor. The weight is supported by balls rolling in a raceway between hardened steel discs and spaced by a suitable brass cage. Attached to the upper end of the



CCL VERTICAL TYPE MOTOR THRUST BEARING PARTS